Amendments To The Claims

This Listing Of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A process for the preparation of a salt of a carboxylic acid with an aminoalcohol of formula:

$$R^1$$
 R^2 Ia, R^2 Ib, and/or

wherein R^1 is selected from the group consisting of 2-thienyl, 2-furanyl, phenyl, 2-thienyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy, 2-furanyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy, and phenyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy, and wherein R^2 is selected from the group consisting of C_{1-4} -alkyl, phenyl, C_{1-4} -alkyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy, and phenyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy, and phenyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy,

comprising asymmetrically hydrogenating a salt of a carboxylic acid with an aminoketone of formula:

wherein R1 and R2 are as defined above,

in the presence of a catalytic amount of a catalyst comprising a transition metal complex of a diphosphine ligand.

Claim 2 (Currently Amended): A The process of Claim 1, comprising preparing for the preparation of a salt of a carboxylic acid with an aminoalcohol of formula:

$$R^1$$
 R^2
 R^2

and/or

wherein R¹ is selected from the group consisting of 2-thienyl, 2-furanyl, phenyl, 2-thienyl substituted with at least one halogen and/or at least one C₁₋₄-alkyl or C₁₋₄-alkoxy, 2-furanyl substituted with at least one halogen and/or at least one C₁₋₄-alkyl or C₁₋₄-alkoxy, and phenyl substituted with at least one halogen and/or at least one C₁₋₄-alkyl or C₁₋₄-alkoxy, and wherein R² is C₁₋₄-alkyl, phenyl, C₁₋₄-alkyl substituted with at least one halogen and/or at least one C₁₋₄-alkyl or C₁₋₄-alkoxy, and phenyl substituted with at least one halogen and/or at least one C₁₋₄-alkoxy, emprising by asymmetrically hydrogenating a salt of a carboxylic acid, wherein the carboxylic acid is selected from the group consisting of substituted C₁₋₁₈-ankanoic acids, substituted monocyclic aromatics acids and substituted bicyclic acids, with an aminoketone of formula:

$$O$$
 R^1
 N
 R^2
 H
 H

wherein R¹ and R² are as defined above.

in the presence of a catalytic amount of a catalyst comprising a transition metal complex of a diphosphine ligand.

Claim 3 (Previously Presented): The process of claim 2, wherein R¹ is 2-thienyl, or 2-thienyl substituted with at least one halogen, and R² is methyl or ethyl.

Claim 4 (Original): The process of claim 3, wherein the compound of formula II is selected from the group consisting of (S)-(-)-3-N-methylamino-1-(2-thienyl)-1-propanol, (S)-(-)-3-N-methyl-amino-1-(3-chloro-2-thienyl)-1-propanol, (R)-(+)-3-N-methylamino-1-(3-chloro-2-thienyl)-1-propanol.

Claim 5 (Currently Amended): The process of claim 4, wherein the transition metal is selected from the group consisting of rhodium, ruthenium and er iridium.

Claim 6 (Previously Presented): The process of claim 7, wherein the diphosphine ligand is selected from the group consisting of:

(S,S,S,S)-"Me-KetalPhos", (S) and (R)-"MeO-BiPhep", and " (R_P,R_P,S_C,S_C) -DuanPhos".

Claim 7 (Previously Presented): The process of claim 6, wherein the compound of formulae Ia and/or Ib is obtained from it's corresponding salt with a carboxylic acid by hydrolysis in the presence of an alkali metal hydroxide or an alkaline earth hydroxide.

Claim 8 (Withdrawn): A salt of a carboxylic acid with an aminoketone of the formula:

$$O = \begin{pmatrix} R^1 & & \\$$

wherein R^1 is 2-thienyl or 2-furanyl, each optionally substituted with one or more halogen atoms and/or one or more C_{1-4} -alkyl or C_{1-4} -alkoxy groups, and wherein R^2 is C_{1-4} -alkyl or phenyl, each optionally substituted with one or more halogen atoms and/or one or more C_{1-4} -alkyl or C_{1-4} -alkoxy groups.

Claim 9 (Withdrawn): The salt of claim 8, wherein the acid is selected from the group consisting of C_{1-18} -alkanoic acids,

(-)-2,3:4,6-di-O-isopropylidene-2-keto-L-gulonic acid,

(+)-2,3:4,6-di-*O*-isopropylidene-2-keto-D-gulonic acid, 2-keto-L-gulonic acid, 2-keto-D-gulonic acid, L-aspartic acid, D-aspartic acid, DL-aspartic acid, benzoic acid, 3-methyl-benzoic acid, salicylic acid, 1-naphthalene carboxylic acid and 2-naphthalenecarboxylic acid.

Currently 10 (Withdrawn): A salt of a carboxylic acid with an aminoalkohol of the formula:

$$R^{1}$$
 R^{2}
 R^{2}
 R^{2}

wherein R^1 is 2-furanyl or phenyl, each optionally substituted with one or more halogen atoms and/or one or more C_{1-4} -alkyl or C_{1-4} -alkoxy groups, and wherein R^2 is C_{1-4} -alkyl or phenyl, each optionally substituted with one or more halogen atoms and/or one or more C_{1-4} -alkyl or C_{1-4} -alkoxy groups, with the exception of salts, wherein the acid is (–)-2,3:4,6-di-O-isopropylidene-2-keto-L-gulonic acid or (+)-2,3:4,6-di-O-isopropylidene-2-keto-D-gulonic acid.

Claim 11 (Previously Presented): The process of claim 1, wherein the transitional metal complex of a diphosphine ligand is a transitional metal complex of an aryldiphosphine ligand or a biaryldiphosphine ligand.

Claim 12 (Previously Presented): The process of claim 1, wherein R¹ is 2-thienyl, optionally substituted with one or more halogen atoms, and R² is methyl or ethyl.

Claim 13 (Previously Presented): The process of claim 1, wherein the transition metal is rhodium.

Claim 14 (Previously Presented): The process of claim 1, wherein the diphosphine ligand is selected from the group consisting of:

$$P$$
—t-Bu P —PPh₂ P —PPh₂

(S,S,S,S)-"Me-KetalPhos", (S) and (R)-"MeO-BiPhep", and " $(R_{P,}R_{P,}S_{C,}S_{C})$ -DuanPhos".

t-Bu

t-Bu

Claim 15 (Currently Amended): A The process of claim 1, wherein for the preparation of a salt of a carboxylic acid with an aminoalcohol of formula:

$$R^1$$
 R^2
 R^2

and/or

wherein R¹ is selected from the group consisting of 2-thienyl, 2-furanyl, phenyl,

2-thienyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy, 2-furanyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy, and phenyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy, and wherein R^2 is selected from the group consisting of C_{1-4} -alkyl, phenyl, C_{1-4} -alkyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy, and phenyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkyl or C_{1-4} -alkoxy, and phenyl substituted with at least one halogen and/or at least one C_{1-4} -alkyl or C_{1-4} -alkoxy,

comprising:

(i) asymmetrically hydrogenating a salt of a carboxylic acid with an aminoketone of formula:

$$O$$
 R^1
 N
 R^2

11,

wherein R1 and R2 are as defined above,

in the presence of a catalytic amount of a catalyst comprising a transition metal complex of a diphosphine ligand; and

(ii) obtaining a compound the compounds of formulae la and/or lb is obtained from its corresponding salt with a carboxylic acid by hydrolysis of said corresponding salt in the presence of an alkali metal hydroxide or an alkaline metal hydroxide.

Claim 16 (Previously Presented): The process of claim 2, wherein the substituted C₁₋₁₈-alkanoic acid is substituted with at least one C₁₋₆-alkyl, C₁₋₆-alkoxy, aryl, amino, protected carbonyl, halogen, hydroxyl or further carboxylic.

Claim 17 (Currently Amended): The process of claim 2, wherein the substituted

monocyclic aromatic acid is substituted with at least one member selected from the group consisting of C₁₋₆-alkyl, C₁₋₆alkoxy, halogen and er hydroxyl.

Claim 18 (Previously Presented): The process of claim 2, wherein the substituted bicyclic aromatic acid is substituted with at least one member selected from the group consisting of C₁₋₆alkyl, C₁₋₆-alkoxy, halogen and hydroxyl.

Claim 19 (Previously Presented): The process of Claim claim 1; wherein the catalyst is present in a catalytic amount.

Claim 20 (Previously Presented): The process of Claim claim 1, wherein the carboxylic acid is a monocarboxylic acid.